

# Minority Status and Labor Market Outcomes:

## Does India Have Minority Enclaves?

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## Abstract

This paper uses data from the 61st Round of the National Sample Survey to understand the employment outcomes of Dalit and Muslim men in India. It uses a conceptual framework developed for the US labor market that states that ethnic minorities skirt discrimination in the primary labor market to build successful self-employed ventures in the form of ethnic enclaves or ethnic labor markets. The paper uses entry into self-employment for educated minority groups as a proxy for minority enclaves. Based on multinomial logistic regression, the analysis finds that the minority enclave hypothesis does not hold for Dalits but it does overwhelmingly for Muslims. The interaction

of Dalit and Muslim status with post-primary education in urban areas demonstrates that post-primary education confers almost a disadvantage for minority men: it does not seem to affect their allocation either to salaried work or to non-farm self-employment but does increase their likelihood of opting out of the labor force—and if they cannot afford to drop out, they join the casual labor market. Due to the complexity of these results and the fact that there are no earnings data for self-employment, it is difficult to say whether self-employment is a choice or compulsion and whether builders of minority enclaves fare better than those in the primary market

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## Minority Status and Labor Market Outcomes: Does India Have Minority Enclaves?

*Markets for labor, land and money are easy to distinguish; but it is not so easy to distinguish those parts of a culture the nucleus of which is formed by human beings, their natural surroundings, and productive organizations, respectively.*

*Karl Polanyi, 1944:162*

**I. Introduction and Motivation:** Building on previous work, this paper uses data from the 61<sup>st</sup> Round of the National Sample Survey to understand the employment outcomes for two sets of minorities in India – Dalits and Muslims. The first is a caste minority and the second a religious minority, and despite many differences, they are similar in many respects as this paper argues later. Almost 18 percent of our sample of working age individuals is Dalit and about 13 percent is Muslim. We ask the question – do minority groups build “enclave labor markets” if they have the requisite wherewithal?

The idea of “ethnic enclaves” or “ethnic labor markets” was first developed in the US context by Alejandro Portes and his colleagues (Wilson and Portes, 1980; Portes and Jensen, 1989; 1992; Wilson and Martin, 2001) who maintain that ethnic minorities who enter the US labor market are discriminated against because they are unfamiliar with the language and culture and are obviously distinct from the mainstream. But they do not necessarily enter at a disadvantage if they have the human capital. If they do, they build “ethnic enclaves” of self-employment and do well in these ventures. This paper tries to apply this conceptual model to the Indian context by testing it for two minorities – each historically discriminated against in different ways. Unfortunately, lack of earnings data does not allow us to directly test whether self-employment has higher rewards than regular salaried work and therefore whether these ventures are successful.

The context for this paper is a heightened awareness in India that formal jobs are on the decline and that in a growing economy, self-employment is at least a next best option – if not the first option at the highest levels. Simultaneously there has been increasing political attention to the issue of labor market outcomes of minorities. Some events in recent years serve to place this in perspective. First, there is an ongoing and often polarized national debate around the issue of extending reservation of seats in public employment to the private sector. Related to this is the national debate around the issue of the “creamy layer” or the fact that second and third generation beneficiaries of quotas form an entrenched elite and should be excluded from the benefits. Second, the Prime Minister set up a high level commission to study the socioeconomic status of Muslims. This Commission, known more popularly as the Sachar

Commission after its Chairman, submitted its report in 2005 and pointed out that the status of Muslims in many areas was worse than that of non-Muslims and employment and earnings was one such area. The government responded by putting in place a number of special initiatives and vowed to track progress better. Third, with increasing numbers of Dalits gaining education, and increased opportunities in the new economy, the terms of the discourse about Dalits and employment have changed as well. Until recently, studies on caste and labor market had tended to focus more on access to reserved quotas and on the relationship between poverty and wage employment rather than opportunities to rise out of poverty and gain social status through self-employment.

In step with the developments cited above, the empirical work on Dalits and Muslims and their employment outcomes has also received renewed attention. In fact, such work in the last few years has served to move the issue of minority employment out of the anecdotal and the political and into the more solid realm of evidence based understanding. For instance, Dalit leaders have historically bemoaned the exclusion of Dalits from self-employment (see Thorat, 2007) but recently a new body of empirical evidence looks at differences between Dalits and non-Dalits (see Jodhka and Newman, 2007 and Thorat and Attewell, 2007 for discrimination in hiring practices; see Deshpande and Newman, 2007; Madheshwaran and Attewell, 2007 and Das and Dutta, 2008 for discrimination in earnings) and consciously refrains from conflating Dalits with Adivasis as earlier literature had tended to do (hence “SC/ST” was often said in the same breath).

The empirical literature on Muslim employment has not been as robust but the Sachar Commission report has certainly strengthened the foundations of the discourse. One of the major preoccupations of Muslim intellectuals had been the poor representation of Muslims in public service and their disproportionate *concentration* in self-employment. Writing about the poor performance of Muslim candidates in the premier civil service examination, the Vice Chancellor of Aligarh Muslim University noted that this “deprives the community of a sense of participation in the governance and management of their country. They are in the process denied a role in the existing adventure of national reconstruction and development” (Hamid, 2001 quoted in Zaidi, 2001). Thus, the popular notion that Muslims have a cultural premium on self-employment and prefer it to salaried jobs is not borne out in the writings of Muslim scholars nor in the growing demand for reservation of jobs for Muslims (Zaidi, 2001; Sachar Commission Report, 2006).

That Muslims are concentrated in self-employment is known more through descriptive tabulations or some qualitative work than by multivariate analyses (such as Lanjouw and Shariff, 2000). Even empirical

studies that do show such patterns in Muslim employment either had not set out to specifically measure the Muslim effect (in that it is a control variable, as in Lanjouw and Shariff's study) or did not put it within a clear theoretical framework to explain the differences. An exception to this was Khandker's (1992) analysis of segmented markets in Bombay, where he measures the effect of background variables, religion being one of them. Regardless, until the report of the Sachar Commission (2005) few analyses had systematically documented the "Muslim effect" in employment. The report of the Sachar Commission brought out the manner in which Muslims are concentrated in certain occupations and alluded to discrimination playing a major part in this.

There is no doubt that the issue of minority status and employment is fraught with political overtones, and few writings have addressed the issue empirically. This paper aims to address that gap through an empirically grounded analysis using national data to understand the relationship between minority status and access to self-employment, and the possible social correlates self-employment. This paper builds on a conceptualization of the labor market not merely as a market in the economic sense but a site where cultural and social relations play out (see Das, 2005; 2006; Das and Desai, 2003). It is here that the opening quote by Karl Polanyi gains additional relevance. Without labeling the Indian labor market "segmented" or "discriminatory" because we do not have tools to test those labels empirically, this paper moves from the assumption that social, historical and cultural factors play a major role in the functioning of this market. We ask how minority status – which is more than a numerical construct – it is a social construct – plays out in labor market outcomes.

The paper is organized in six sections. This introduction comprises Section I. Section II is a discussion of the conceptual underpinnings of the paper and its application to India. Section III lays out the key hypotheses, data and methods. Section IV and V describe the results of the sociometric analysis and discuss their implications for the questions we have posed. The final section is a conclusion that sets out areas for greater empirical exploration.

**II. The Idea of "Ethnic Enclaves" and Its Application to the Indian Labor Market:** The role of ethnicity in labor market outcomes has long engaged the attention of sociologists interested in social inequality. In hypothesizing about how minority status could affect employment allocation, we use the work of Portes et al (Wilson and Portes, 1980; Portes and Jensen, 1989; 1992; Wilson and Martin, 2001) and their idea of "ethnic labor markets". Some of their arguments can be applied more readily in the Indian context than others and therefore need adaptation. The main thrust of the argument made by Portes, Wilson and their colleagues is that immigrants who enter the US labor market are discriminated

against because they are unfamiliar with the language and culture and are obviously distinct from the mainstream. In many cases they may also have restrictions on work due to their immigrant status. Often they live in geographical concentrations or ghettos. However, Portes and others disagree with the conventional notion that all immigrants enter the labor market at the bottom end, and with assimilation, work their way up. On the contrary, they argue, when immigrants have the necessary human capital, they build their own “ethnic enclaves” – self-employed ventures which are a part of an “ethnic labor market”. The role of ethnicity in labor markets has been empirically tested in other places as well (Semyonov, 1988 for Israel; Evans, 1989 for Australia; Clark and Drinkwater, 1999 for UK), and the ethnic enclave idea has held up in a variety of cultural and geographical settings.

The contention of Portes et al is that “ethnic enclaves” in fact provide positive rewards to their members and “ethnic entrepreneurship” is an “unorthodox, but important avenue for social mobility of ethnic minorities .....(and can) suggest alternative policies for those still mired in poverty” (Portes and Jensen, 1992:418). Thus, immigrant entrepreneurs actually produce the characteristics of the primary market in terms of income and not of the secondary market. These entrepreneurs also prefer to hire individuals from their own ethnic group (in the process perhaps creating relationships based on hierarchy, privilege and exploitation among their own ethnic group) thus creating a social and labor network, which interacts as a group with the outside market. In so doing, the enclave has the solidarity and protection of numbers, and helps its members to circumvent discrimination. It also skirts competition from the mainstream and majority. While the work of Portes and his colleagues has been contested on methodological and definitional grounds, that debate is not the subject of this paper (see Sanders and Nee 1987; 1992). A large body of work by Marcel Fafchamps also focuses on the positive role that networks play especially in trading (see for example Fafchamps 2007).

The work of Portes on ethnic enclaves and immigrant entrepreneurship derives its roots from earlier theorizing by Edna Bonacich on ethnic antagonism and split labor markets. Bonacich (1972) argues that “ethnic antagonism first geminates in a labor market split along ethnic lines. To be split, a labor market must contain at least two groups of workers whose price of labor differs for the same work, or would differ if they did the same work” (Bonacich, 1972:549). While the disadvantage that drives immigrants to accept low levels of pay in a split labor market is central to Bonacich’s thesis, Portes and others move away from this, postulating instead that immigrants have the necessary wherewithal to do well, but skirt the discrimination they expect in the primary market, by developing their own business ventures and succeeding at those.

Can “ethnic labor markets” be applied in the Indian context? Clearly, the issue of “immigrants” in the Indian context does not arise, but we go a step back to ask - can the concept of “ethnicity” even be applied to Dalits and Muslims? We argue that it can and proceed from Betiella’s (1991) exposition where he assesses the application of the term *ethnicity* to Dalits, Adivasis and Muslims in India. Betiella concludes that while there may be differences in the application of the term *ethnic* in other contexts (such as immigrants with clear-cut physical differences from the majority population and that caste has a clear ritual hierarchy), the term *ethnic* nonetheless does apply to India for three reasons. First, he views ethnicity as a set of objective differences between population groups. Second, he sees an awareness of these objective differences as key to the definition and third, he views political organization along these lines of difference as the clinching factor in what can be considered ethnicity. On all three counts Dalits and Muslims can be considered “ethnic” groups in India and one can argue for “ethnicity” as a social concept derived from caste and religious status. However, we prefer to use the term “minority” rather than “ethnic group” since in Indian scholarship “ethnicity” is a disputed term and not very widely used.

The important question for this paper is whether the status of Indian minorities is akin to that of ethnic minorities in the United States in terms of their participation in the labor market. Do Indian minorities also skirt a discriminatory “primary” market to engage and excel in a “secondary” labor market that is founded on their strengths and networks? With the data at our disposal, we cannot answer this question conclusively. But in building our hypothesis, and drawing on the conceptual work on ethnic enclaves, we believe that the idea can be extended to the larger context of religious and caste minorities, and we can thus, expect to have “minority enclaves” or “minority labor markets”. *Therefore, due to data limitations, rather than look at earnings in self-employment as the marker of minority enclaves, we look at entry into self-employment as that marker of enclaves.*

Are Dalits and Muslims Comparable? Indian academics are often startled at the comparison between Dalits and Muslims. The two minorities grew out of very different historical circumstances - one the product of an age-old ideology of caste and the other the product of waves of conversion and invasion, so complex that it is impossible to separate who was converted and when. There are other differences as well – those that play out in the present days and not historical artifacts. The most important of these stems from Dalits as beneficiaries of a system of reserved quotas in public education and employment that allows them access to the salaried labor market (since the major part of this salaried market is in the public sector). A minor difference is that while there are large conclaves of Muslims in urban areas, Dalits reside mostly in rural areas. Finally, Muslims have a strong elite and social networks that have



allowed them to secure space in trading occupations and Dalit networks although strong politically, are weak in terms of garnering access to assets and markets.

Yet, we argue that as sociologically conceptual categories, Dalits and Muslims have strong similarities that make them comparable entities for this analysis.

First, the representation of Dalits and Muslims in our sample (and in the population as a whole) is roughly similar – 18 percent are Dalits and 13 percent are Muslims. So, numerically they have similar strength. Second, perhaps the greatest social similarity between them is that there is an elaborate dominant religious ideology that “excludes” them. The Brahmanical ideology that confers the status of the “other” to these groups plays out also in the type of occupations they pursue. Third, while most social groups in India have historically and hierarchically determined occupations, the important similarity among Muslims and Dalits is that they are for the most part landless.

**Table 1: Dalits and Muslims in India**

<b>Dalits</b>	<b>Muslims</b>
Subject to ritual segregation and discrimination, while remaining within the Hindu fold (in varying degrees) – ritual dominance by the majority.	Outside the Hindu fold, hence no <u>ritual</u> discrimination or <u>ritual</u> dominance by Hindus – but treated as the “other” by the majority.
Limited ownership of land in rural areas	Limited ownership of land in rural areas
Few restrictions on women; and women’s labor force participation among Dalits (and Adivasis) is high compared to other caste/religious groups	Greater restrictions on women and very low female labor force participation rates
Rise of new elites and political organization, and a sub-culture <u>not</u> acknowledged by the majority.	Existence of traditional elites with strong social networks and distinct sub-culture acknowledged by the majority.
Traditional occupational skills have been demeaned by the majority due to their ritually “unclean” status. Dalits traditionally concentrated in demeaning, manual work.	Many traditional skills (weaving, trading, craftsmanship) often highly valued by the majority. Historical focus on trading also provides networks.
Enmeshed geographically in majority clusters – thus, there are “dalit bastis” or neighborhoods within villages but few “dalit villages”	Concentrated in geographical clusters – there are Muslim-majority villages and urban neighborhoods. Muslims are also concentrated in certain states.
Reserved quotas in government jobs and publicly funded employment	No reserved quotas except informal quotas in some states like Kerala

We do not include the two other large minorities in this analysis. They are Adivasis (or Scheduled Tribes) and “Other Backward Castes” (OBC). Adivasis are in many ways a self-contained category. They own at least subsistence land and so, when they cannot get benefits from job quotas, either due to lack of education or due to lack of access to information about vacancies, or due to the fact that these vacancies remain unfilled, they have subsistence agriculture to fall back on. As a last resort, they end up as casual laborers (Das, 2006). They are outside the purview of the caste system and so are not “ritually dominated” in the same way as Dalits are. That said, the situation of Adivasis is so much worse than that of any other category in terms of poverty and lack of overall access to human and other capital, that understanding their labor market outcomes needs independent theoretical and empirical work. OBCs on the other hand, could well be dominant castes in many areas and in any case are so heterogeneous in both their socioeconomic status and their ritual positions that the classification of “OBC” only works as an administrative construct - certainly not as a generic social or economic one.

**III. Key Hypothesis, Data and Methods:** Our main interest in this paper is to find out what educated Muslims and educated Dalits do. We start from the assumption that for uneducated individuals, the casual labor market is the default option. But with some human capital – particularly secondary education and above – the chances of getting salaried jobs and better quality self-employment increase. For Dalits reserved jobs in government should take care of some of the supply of educated labor from amongst them. The remainder of the educated persons ought to be in self-employment, since they should have the requisite skills. In the case of Muslims, since they have no quotas in government jobs, they would be more likely to be in self-employment than Dalits are. While we are unable to test if such engagement is better or worse for them than regular salaried work, disproportionate engagement in self-employment nevertheless could be an indication of their lack of options in the “primary” or the more coveted market. Thus, as pointed out earlier, due to data limitations, rather than look at earnings in self-employment as the marker of minority enclaves, we look at entry into self-employment as that marker of enclaves.

Data for this analysis come from the Employment and Unemployment Schedule (Schedule 10) of the National Sample Survey 61<sup>st</sup> Round, conducted in 2004-05. All analysis is weighted and the multivariate analysis is conducted separately for urban and rural men in the age-group 15-59 years, **excluding current students**, and based on usual principal status activity only. The reason for excluding students is that in the age-group 15-25 many are still students and this affects the labor force participation rates. If we take only those individuals who are available for employment, we can come to a more precise understanding of who is employed and who stays out of the labor market.

Our analytic sample includes 104738 men in rural areas and 101073 in urban areas. We first predict the probability of participating in the labor market at all and then proceed to understand what kinds of employment types these men would be allocated to. Thus, for the first set of analyses we report the odds ratios of a logistic regression model where the dependent variable is a dummy for participating in the labor market in the last 365 days.

For the second set of analyses we use a multinomial logistic regression model where the dependent variable has five categories that suggest a loose hierarchy of employment types to assess individuals' allocation to different employment types – viz. regular salaried, non-farm self-employed, farm-based self-employed, casual labor and out of the labor force. We use regular salaried work as the comparison category, since this is the preferred form of employment for educated individuals and the employment type they aspire to – not merely due to its advantages in terms of wages but also in terms of job security, benefits and status. We then estimate the likelihood of assignment of individuals to each of the employment categories simultaneously. Unlike Portes et al, we use *entry* into preferred employment categories, rather than earnings to test our hypothesis.

The independent variables of interest are religion and education (denoting ability to conduct successful self-employed ventures). Caste minorities are coded as three dummies – Dalit, Adivasi, with non-Dalit/Adivasi as the omitted reference category. Religious minorities are coded as three dummies as well – Muslim, other religions, with Hindu as the omitted reference category. While the two sets of minorities are for the purposes of our social measurement different, in that the comparison category for Muslims is Hindu and the comparison category for Dalits is non-Dalit (regardless of religion), yet conceptually the broad reference category is non-Dalit/Adivasi (or broadly “upper caste”) Hindu.

Education is coded as four dummies – some primary, primary completed and post-primary with uneducated as the omitted reference. We realize that post-primary education is a very broad category but when we run models for rural areas, the numbers of minorities with higher levels of education falls to such an extent that our analysis becomes untenable and so we conflate higher education into “post-primary”<sup>1</sup>. Individual and household demographic and residence characteristics, including landownership are controls. Land is an important determinant in India of the type of employment individuals are assigned to, for not only is it a marker of social status but also of capital. Thus, we expect land to be

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<sup>1</sup> However, in urban areas it may be possible to break education down into finer categories but for the sake of comparison this paper keeps to the broad “post-primary” category for both rural and urban areas.

important even in self-employment at least in rural areas. In order to understand the effect of education with minority status, we add also interaction terms (education multiplied by caste and religious status) to the main model.

The coefficients of multinomial logistic models are based on a reference category dependent variable (in this case regular salaried work). The coefficients for each of the other dependent variables have to be interpreted in relation with the omitted category. This can sometimes become confusing. In order to have a clearer understanding of the coefficients, we calculate mean predicted probabilities for each dependent variable category with the main independent variables of interest (in this case Dalit and Muslim). For instance, we first calculate the mean predicted probability of being in formal employment for Muslims, then calculate the same probabilities if they were not Muslim but retained all other characteristics. The difference gives us the net effect of being Muslim for formal work.

While we have undertaken the analysis separately for men and women, the focus is on men and we report only those results. This is because less than 20 percent of Muslim women are in the labor market and previous analysis shows that comparing men and women is not as relevant as comparing men across caste and religious groups on the one hand and women of different caste and religious groups on the other. The subject of why Muslim women stay out of the labor force has been explored in detail elsewhere (Das, 2005) and employment issues of Dalit and Adivasi women have also been analyzed (see Das and Desai, 2003; Das, 2006). When it comes to assignment to employment types, we believe women's employment matters little since most stay out of the labor force. Thus, *the interesting question we have explored elsewhere is why women stay out of the labor force while for men the interesting question is what type of employment outcomes they have*, since almost all men are in the labor force if they are not students. Conceptually too, if there are indeed "minority enclaves" they would be driven by men with women playing a "support role" and often not even reporting themselves as employed, as we have found in previous analysis (Das, 2005). The issues for women's employment thus are complex and include under-measurement among other factors.

Finally, this analysis is only a first step towards understanding the idea of minority enclaves. While some of its results are new and hitherto unexplored, there are also limitations arising from analysis of aggregate data. First, we are not able to capture whether self-employment is a choice or a necessity since we cannot see returns to self-employment in the form of earnings and so we do not know if minorities that build enclaves do so by choice. So we measure returns by entry into job types. Future analysis focusing on earnings would be able to address some of these more complex issues conclusively. Second, we realize

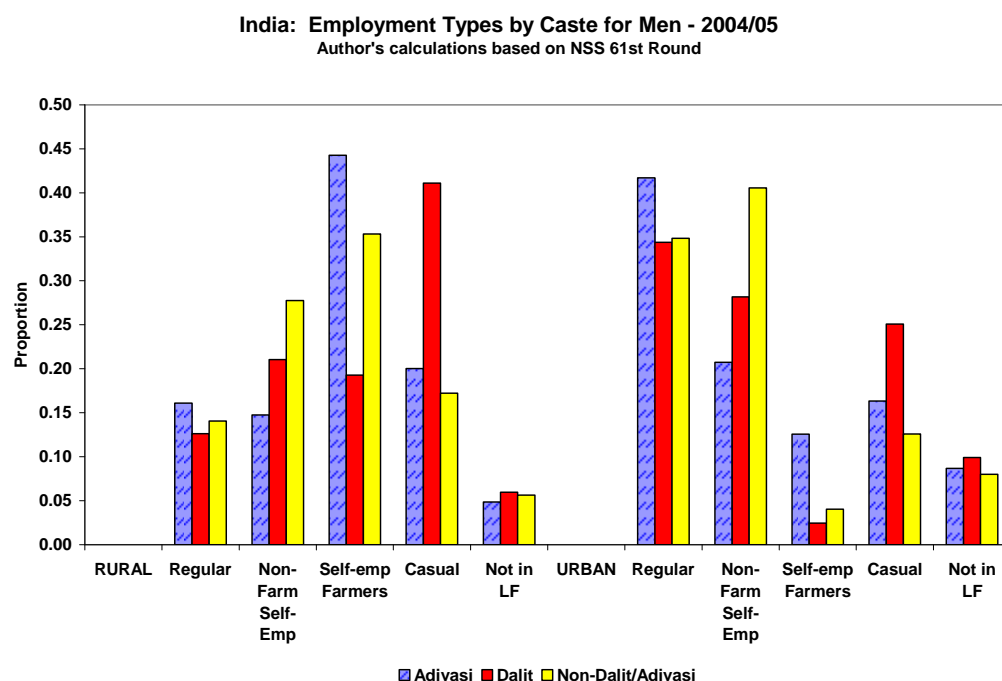
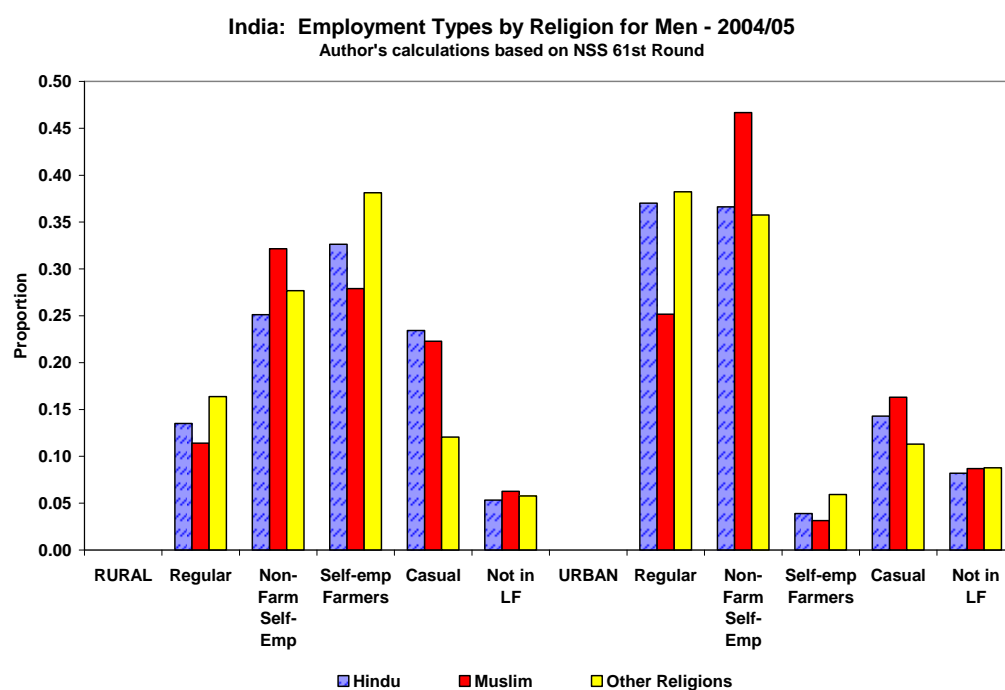
that self-employment is a vast and heterogeneous category and some jobs may be lucrative and others may be “disguised wage employment”. We cannot separate different types of self-employment and in the process miss out on the heterogeneity. Finally, we have no way of understanding the value of networks and other forms of “entrepreneurial wherewithal” that is so important in building minority enclaves. We recommend that future studies focus on these themes to understand the barriers to self-employment better.

**IV. Results:** The descriptive and bivariate associations for this analysis are contained in Figures 1 and 2 and in Table 2. Annex Table 4 lays out the odds ratios of logistic regression models predicting the probability of labor force participation, while Annex Tables 5 and 6 lay out the coefficients of the multinomial regression models in rural and urban areas respectively. Tables 3 and 4 below are predicted probabilities calculated from multinomial regressions and indicate the effects of being Dalit and being Muslim.

When we tabulate the allocation to employment types by religion in urban areas we find that 47 percent of Muslim men and 37 percent of men from other religions including Hindus are in non-farm self-employment. However, 25 percent of Muslim men but 37 percent of Hindu men are in salaried employment. In rural areas, where farming is the predominant form of employment for the majority of men, we find Muslims to be slightly less likely to be farmers and here too they are more likely to be self-employed in non-farm enterprise and less so in formal jobs. There seems to be little difference by religion in men who opt to stay out of the labor force or in casual labor (except that men from other minority religions are far less likely to be casual laborers and have generally much better employment outcomes than either Hindus or Muslims).

Tabulations by caste indicate that in urban areas, majority caste men have an advantage, perhaps because there are greater opportunities in these areas in the private sector which does not have job quotas by caste. But this difference disappears in rural areas where formal jobs are limited and restricted to the public sector. Men from the “general category” (or upper caste Hindu men) also have an advantage in non-farm employment both in urban and rural areas. Dalit men in rural areas are distinct from other castes categories in having very low access to farm based self-employment. Only 19 percent of Dalit men as compared to 44 percent Adivasi men, 32 percent OBC men and 35 percent men from the “general category” are self-employed farmers in rural areas. Perhaps as result, Dalit men are more than twice as likely as other groups to be casual laborers. When we look at non-farm self-employment, our major employment type of interest, we find in rural areas that Dalits are slightly less likely than OBCs and general category men to be in such employment in rural areas, but this difference widens dramatically in

urban areas. In cities and towns, 28 percent of Dalit men but 44 percent men from general category and 39 percent men from OBC category are in self-employed ventures.



When we look at where education takes men in the Indian labor market (table 2) we find results that seem to draw attention to the heterogeneity of self-employment. Increasing levels of education are associated with jobs in the salaried labor market and a dramatic decline in their representation in casual jobs. But

education does not seem to increase the likelihood of being in either farm based or non-farm self-employment. There seems to be roughly equal distribution of men from different educational categories in non-farm self-employment. In rural areas, education also does not seem to affect men's participation in farming and roughly one third of men from every educational category are in farming. This probably points to the existence of both landowners and workers in farming.

**Table 2: Where does education take men in the labor market?**

*Bivariate associations between education level and employment type 2004/05*  
(Author's Calculations Based NSS 61<sup>st</sup> Round for Men Age 15-59 Excl. Students)

<b>Men</b>	<i>No Education</i>	<i>Below Primary</i>	<i>Completed Primary</i>	<i>Post- Primary</i>	<i>Total</i>
	Proportion				
<b>Rural</b>					
Regular	0.05	0.07	0.09	0.22	0.14
Non-Farm Self-Emp	0.21	0.25	0.26	0.26	0.25
Self-Emp Farmers	0.33	0.35	0.37	0.33	0.34
Casual	0.37	0.29	0.25	0.12	0.22
Not In LF	0.05	0.04	0.04	0.07	0.06
Total	1.00	1.00	1.00	1.00	1.00
<b>Urban</b>					
Regular	0.18	0.25	0.28	0.42	0.35
Non-Farm Self-Emp	0.37	0.39	0.38	0.37	0.37
Self-Emp Farmers	0.06	0.05	0.05	0.04	0.04
Casual	0.31	0.25	0.22	0.08	0.14
Not In LF	0.09	0.07	0.07	0.09	0.08
Total	1.00	1.00	1.00	1.00	1.00

The multivariate results for labor force participation from the 61<sup>st</sup> round are broadly in keeping with our analyses based on previous rounds of the NSS. Muslim status has no significant association with labor force participation for men (but it has huge effects for women) in either urban or rural areas. Dalit status is on the other hand associated with higher labor force participation in rural areas but has no effect in urban areas. Higher levels of education are positively associated with men's labor force participation (though not women's as we have discussed elsewhere) and these effects are expectedly stronger in cities and towns than in villages since labor market opportunities are greater in the former. We have argued elsewhere that land is not merely an economic asset but also a marker of status and influences a number of outcomes. Here too we find that owning land is associated not only with greater likelihood of labor force participation but also the likelihood of being in non-farm ventures.

The complexity of this analysis comes from the multinomial models, which estimate the probability of being in different employment categories compared to salaried work. Where the question of self-employment is concerned, the results from urban areas are more relevant than for rural areas. In the

latter, farming is still the major basis for employment and the non-farm sector is in its infancy. But in urban areas, where the real non-farm jobs are located, being Dalit means that men are ever so slightly disadvantaged even in regular salaried work, but hugely disadvantaged in self-employment. Dalit status makes urban men, 12 percent less likely to be self-employed. Of course, the real effects of being Dalit are felt in a 25 percent greater likelihood of being casual laborers in rural areas and a similar though slightly smaller likelihood of being out of self-employed farming, since Dalits are disproportionately concentrated in rural areas.

Most insightful are the interaction effects between education level and Dalit or Muslim status. The interaction terms multiplying the effects of Dalit status and education show that Dalit men with post-primary education have distinctly lower returns in the form of formal jobs compared to other men. In that case, should educated Dalit men not set up small businesses and move to the next best alternative, because education gives them better skills and the formal labor market does not absorb them? It seems not, because, they are even more disadvantaged in non-farm self-employment than they are in formal employment. In the wake of expanding education, once Dalit men do not get access to salaried jobs, they crowd into casual labor, or stay out of the labor force if they can afford to and this effect is present for both rural and urban Dalit men.

The picture that emerges for employment options for educated Dalit men is that they have an advantage in the low-end formal jobs – ones that require primary education - but a glass ceiling or a system of rationing seems to be in existence which deters their entry into higher level jobs. It is also possible that there are more low-end jobs in the government than those that require higher education. These results also indicate that once reserved quotas are filled up (especially for Group A, B and C jobs) Dalit candidates have no other avenue such as self-employment open to them. Expressed differently, job quotas create a system of rationing of regular salaried (public sector) jobs for Dalit men, thus capping their access to regular jobs, since they cannot penetrate the non-reserved public sector jobs. A corollary of this is also the generation of an entrenched elite among Dalit men, who benefit from reservations across generations.

Being Muslim has large and significant *positive* effects for participation in self-employment in general but in urban areas, there are almost equally large but *negative* effects for being in regular salaried jobs (Table 4). So, being Muslim in a city or town makes men 12 percent more likely to be self-employed and commensurately 14 percent less likely to have a salaried job. In rural areas, Muslims, like Dalits, are not landowners and so being Muslim makes men 8 percent less likely to be self-employed in farming – a disadvantage less pronounced than that for Dalits. Again, the really vivid results are for the multiplied



effects of Muslim and post-primary education. We would have expected that if they built “enclave labor markets” from choice, that the more educated ones would be more likely to be self-employed, at least in urban areas. This is not borne out from NSS data. Post-primary education does not increase the likelihood of Muslim men to be self-employed. On the contrary, when compared to salaried work, post-primary educated Muslim men become more likely to engage in casual labor or stay out of the labor force. So, much like Dalit men, Muslim men too stay out of the labor market if they can afford to, and if they absolutely cannot, perhaps they join casual labor. The “education penalty”: also seems to be higher for Muslim men than for Dalit men.

**Table 3: Dalit Effect on the Mean Predicted Probabilities of Various Employment Categories**

**MEN ONLY**

(Author’s Calculations Based on Multinomial Logistic Regression Models - NSS 61<sup>st</sup> Round for Men Age 15-59 Excl. Students)

<i>Dalit Effect for Rural Males</i>						<i>Dalit Effect for Urban Males</i>					
	Regular	Non-Farm Self-Emp	Self-Emp Farmers	Casual Workers	Out Of the LF		Regular	Non-Farm Self-Emp	Self-Emp Farmers	Casual Workers	Out Of the LF
Non-Dalit	0.10	0.21	0.37	0.28	0.05	Non-SC	0.39	0.39	0.03	0.12	0.07
Dalit	0.09	0.15	0.19	0.52	0.05	SC	0.38	0.27	0.02	0.23	0.10
<b>Dalit Effect</b>	<b>-0.01</b>	<b>-0.06</b>	<b>-0.18</b>	<b>0.25</b>	<b>0.00</b>	<b>SC Effect</b>	<b>-0.01</b>	<b>-0.12</b>	<b>-0.01</b>	<b>0.12</b>	<b>0.02</b>

**Table 4: Muslim Effect on the Mean Predicted Probabilities of Various Employment Categories**

**MEN ONLY**

(Author’s Calculations Based on Multinomial Logistic Regression Models - NSS 61<sup>st</sup> Round for Men Age 15-59 Excl. Students)

<i>Muslim Effect for Rural Males</i>						<i>Muslim Effect for Urban Males</i>					
	Regular	Non-Farm Self-Emp	Self-Emp Farmers	Casual Workers	Out Of the LF		Regular	Non-Farm Self-Emp	Self-Emp Farmers	Casual Workers	Out Of the LF
Non-Muslim	0.10	0.19	0.34	0.33	0.05	Non-Muslim	0.41	0.35	0.03	0.13	0.08
Muslim	0.07	0.29	0.26	0.32	0.06	Muslim	0.27	0.48	0.02	0.15	0.08
<b>Muslim Effect</b>	<b>-0.02</b>	<b>0.10</b>	<b>-0.08</b>	<b>0.00</b>	<b>0.01</b>	<b>Muslim Effect</b>	<b>-0.14</b>	<b>0.12</b>	<b>0.00</b>	<b>0.02</b>	<b>0.00</b>

**V. Discussion:** The minority enclaves hypothesis rests on the assumption that those who are excluded from or disadvantaged in formal employment (or the primary labor market), will set up alternative and lucrative “enclaves” or “minority labor markets” based on (non-farm) self-employment. In India, when we say formal employment we mean teachers, clerks, security personnel and office attendants, mostly in

the public sector – jobs that come with security, pension and several important perquisites that confer a social status especially in rural areas but also in small towns and cities. While non-farm self-employed occupations are not necessarily high status and are highly heterogeneous, they are nonetheless the next best alternative to formal jobs. An important mediating factor in the push out of formal jobs is the effect of job quotas or affirmative action for Dalits and Adivasis.

The results from this analysis demonstrate that the “minority enclave hypothesis” does not hold for Dalits but it does so overwhelmingly for Muslims. Dalits are highly unlikely to be in non-farm self-employment and are the least likely builders of minority enclaves. We do not see a “push” out of salaried work in the same way as we do for Muslims. Perhaps reserved jobs in government work towards bringing them on par with non-Dalits in the small pool of formal jobs. However, it is not because they have regular jobs that they do not build minority enclaves, but because they do not have the wherewithal to move into self-employment.

Several pieces of anecdotal evidence point to the exclusion of Dalits from credit markets. Small studies also point to the possibility of small Dalit entrepreneurs especially in rural areas being prevented from moving out of caste based occupations into self-employed ventures through social pressure and ostracism (see for instance, Venkteswarlu, 1990, cited in Thorat, 2007) and in other ways being denied fair opportunities to participate in more lucrative trades. Therefore, Dalits in rural areas may be self-employed in a variety of low-end service trades like masonry, carpentry etc. but moving out of these trades or expanding them may present significant barriers, as they are locked into a web of social relations based on these trades.

In urban areas, Dalits who do not get salaried jobs are actually just casual laborers. Here, in these “melting pots” “traditional” Dalit trades have little value and Dalits who may have wanted to enter self-employment do not have the “entrepreneurial wherewithal” to do so. If Dalits had the requisite wherewithal in the form of networks, access to capital, markets and raw material needed to start small self-employed ventures, indeed they would have done so. But since Dalits (and Adivasis) also are disproportionately poor, they lack the means to form minority enclaves, and thus they crowd into casual labor. Therefore, the second reason why they cannot build minority enclaves is because they do not have the requisite access to the inputs required to set up these businesses.

Muslim men seem to fit the minority enclave hypothesis to an extent. They do not get regular salaried jobs and the “push” out of salaried work emerges clearly in our analysis, although some may argue that this is not a “push” out of salaried jobs but a “pull” into self-employment. So they end up highly likely to

be self-employed in non-farm occupations. These effects are much more pronounced in urban areas, in spite of the fact that there are more salaried jobs. Muslims live and operate their businesses in geographical clusters within cities and towns, such as Crawford Market in Mumbai to cite a well-known example. Other cities with a substantial Muslim population like Hyderabad, Bhopal, Kolkata and Patna, also have geographical enclaves, in much the same way as Portes and his colleagues (Wilson and Portes, 1980; Portes and Jensen, 1989; 1992; Portes and Martin) describe the business operations of Chinese and other Asian ethnic groups in US cities. Thus, for Muslims, it is fairly apparent that minority enclaves are a reality – one that plays out more intensely in urban areas due perhaps to the structure of opportunities and the absence of farm related work.

The quality of their self-employed occupations Muslims pursue however leaves us in a quandary while asserting that Muslims are the builders of minority enclaves. Ideally as we have pointed out, we would have liked to use earnings to look at returns to self-employment. But in the absence of that, we find that the interaction of education and Muslim status is telling. The interaction of Muslim with post-primary education in urban areas, demonstrates that post-primary education confers almost a disadvantage: it does not seem to affect their allocation either to salaried work or to non-farm self-employment but does increase their likelihood of opting out of the labor force - and if they cannot afford to, they join the casual labor market.

If the multiplied effect of post-primary education and Muslim status makes men more likely to opt out of the labor force, or even to be casual laborers what exactly is the implication of their overwhelming concentration in self-employment? What it means perhaps is that Muslim men who have lower levels of education enter into low-paying self-employed occupations in an effort to skirt the discriminatory formal labor market. But when they have higher levels of education they do not have access to higher order self-employed occupations that are commensurate with their education levels. This is in keeping with earlier analysis (Das, 2002) that indicates that half of all Muslim men are traders, merchants and shopkeepers and the other half are in a range of petty occupations such as tailoring, weaving dyeing, transport, and in building activity as carpenters and masons.

## **VI. In conclusion ....**

The results of this study bring out some important issues for the employment outcomes of minorities in particular and the Indian labor market as a whole.

- First, while reserved quotas temper the disadvantage in formal jobs for Dalit men, there are not enough of these jobs to keep even educated men out of casual labor. The effect of poverty and perhaps lack of networks and other “entrepreneurial wherewithal” is felt most strongly by Dalits who cannot enter self-employment due to a variety of social and economic reasons. For Muslims, the lack of options in regular salaried jobs appears to push them to build minority enclaves. Thus, the idea of ethnic enclaves in the Indian context applies to Muslim men.
- Second, education seems to have counterintuitive effects on allocation to employment types<sup>2</sup>. In the absence of acceptable employment opportunities, educated minority men would rather opt out of the labor force if they can afford to; or else, undertake low status employment. The returns to education in the form of entry into preferred employment -regular salaried jobs are lower for these groups compared to “caste Hindus”.

Given our results and the limitations of our data, we venture a last tentative word on whether “minority enclaves” are good or bad. Since we cannot measure earnings from self-employment we are unable to say conclusively whether “enclave labor markets” are good or bad. For Muslims it appears that the “push” out of salaried jobs combined with lack of access to land in rural areas has historically necessitated that they set up enclaves – it is likely that if we do have earnings, we may find that this employment strategy is a positive one; but in social terms, if enclave labor markets come into being due to a “push”, they are likely to have negative externalities in other areas – areas we cannot anticipate.

What is puzzling about the results for Muslims is that education is not associated with either salaried work or with non-farm self-employment, but rather with casual work or with being out of the labor force. This seems to indicate that the returns to education for Muslims are low in the form of entry into coveted jobs. In that case, can the enclave labor markets they build be entirely positive? We cannot say for sure, but really appears as though we may be seeing discrimination in the labor market for educated Muslim men, in much the same way as we see for Dalit men.

For Dalits, low availability of credit, being typed into caste-specific menial occupations, combined with a social pressure to stay in those occupations means that they do not have access to “enclave labor markets” even if they are educated. So, while the salaried labor market absorbs some educated Dalits, clearly there are not enough of those jobs to absorb the growing pool of educated Dalits. What do they do? Rather than move into the next best strategy – of non-farm self-employment, they either stay out of the labor force or as last resort, become casual laborers. Thus, the builders of “minority enclaves” in India are

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<sup>2</sup> We have found this in previous analysis as well (see Das, 2006).

predominantly Muslims and they seem to act in much the same way as ethnic minorities in other countries do.

**Annex Table 1: Dependent Variable Categories for Multinomial Logistic Regression**  
**(Predicting the Probability of Different Employment Outcomes)**

<b>Dependent Variable Category</b>	<b>Coding criteria (based on usual principal status activity and National Classification of Occupations)</b>
1. Formal Work	Regular salaried or wage employee (31)
2. Non-Farm self-employed	Own account workers not hiring labor (11) Own account employers (12) Unpaid family helpers (21) <b><u>And</u></b> Excluding codes 60-65 of the National Classification of Occupations at the 2 digit level
3. Farm-based self-employed	Own account workers not hiring labor (11) Own account employers (12) Unpaid family helpers (21) <b><u>And</u></b> Including codes 60-65 of the National Classification of Occupations at the 2 digit level
4. Casual Wage workers	Worked as casual labor in public works (41) Worked as casual labor in other types of works (51)
5. Out of the Labor Force and Unemployed	Unemployed (81-82) Pensioners, rentiers, prostitutes, beggars, smugglers, disabled, others (94-97) Domestic workers (92-93) Students (91)

**Annex Table 2: Independent Variables and Coding**

<b>Variable</b>	<b>Coding</b>
<b>Age</b> <b>Age Squared</b>	i. In years ii. Age Squared as a continuous variable
<b>Marital Status</b>	<b>Dummy</b> Married =1 if currently married Any other =0
<b>Education</b>	<b>4 Dummies</b> No education (reference) Below primary Primary completed Post-primary (secondary and above)
<b>Region</b>	<b>Dummies</b>  <b>North</b> =1 if Himachal Pradesh, Punjab, Haryana, Rajasthan, Chandigarh, Delhi <b>East</b> =1 if West Bengal, Orissa, Andaman and Nicobar Islands <b>West</b> =1 if Gujarat, Maharashtra, Goa, Dadra and Nagar Haveli, Daman and Diu <b>South</b> =1 if Tamil Nadu, Karnataka, Kerala, Andhra Pradesh, Lakshadweep, Pondicherry <b>North-East</b> =1 if Manipur, Tripura, Arunachal Pradesh, Sikkim, Assam, Meghalaya, Mizoram, Nagaland <b>Central (Reference)</b> =1 if Bihar, Jharkhand Uttar Pradesh, Uttaranchal, Madhya Pradesh
<b>Household Size</b>	<b>Continuous</b>
<b>Household Head</b>	<b>Dummy</b>
<b>Spouse of Head</b>	<b>Dummy</b>
<b>Land Possessed</b>	<b>Continuous (in hectares)</b>
<b>Caste</b>	<b>Dummies for non-SC/ST (reference), Dalit or SC, Adivasi or ST</b>
<b>Religion</b>	<b>Dummies for Muslim, Hindu (reference) and other religions</b>

**Annex Table 3: Weighted means and standard deviations of key variables (Men 15-59 excl students)**

Variable	RURAL		URBAN	
	Mean	Std. Dev.	Mean	Std. Dev.
In the labor force	0.97	0.16	0.97	0.18
Regular	0.09	0.29	0.39	0.49
Non-Farm Self-Emp	0.20	0.40	0.37	0.48
Self-emp Farmers	0.33	0.47	0.03	0.17
Casual	0.33	0.47	0.13	0.34
Not in LF	0.03	0.16	0.03	0.18
Age	34.11	11.57	34.54	11.26
Age2	1297.45	833.88	1319.91	822.92
Married	0.75	0.43	0.71	0.46
Household size	5.79	2.79	5.33	2.78
Below Primary	0.13	0.34	0.08	0.28
Primary Completed	0.16	0.37	0.14	0.35
Post-primary	0.39	0.49	0.65	0.48
Household head	0.59	0.49	0.59	0.49
Land Possessed	0.99	1.92	0.18	2.41
Region: North	0.11	0.32	0.16	0.37
Region: South	0.22	0.41	0.26	0.44
Region: East	0.14	0.34	0.11	0.31
Region: West	0.13	0.33	0.23	0.42
Region: NE	0.05	0.21	0.02	0.12
Muslim	0.11	0.31	0.15	0.36
Other religion	0.05	0.22	0.06	0.24
Dalit	0.21	0.41	0.15	0.36
Adivasi	0.11	0.31	0.03	0.16
SC*Primary Completed	0.04	0.18	0.03	0.17
SC*Post-primary	0.06	0.24	0.07	0.26
ST*Primary Completed	0.02	0.13	0.00	0.06
ST*Post-primary	0.02	0.15	0.01	0.12
Muslim*Primary Completed	0.02	0.14	0.03	0.16
Muslim*Post-primary	0.03	0.17	0.07	0.26



**Annex Table 4**

**Odds ratios of Logistic Regression Models Predicting the Probability of Labor Force Participation**

	RURAL MEN			URBAN MEN		
age	1.242*** (0.019)	1.244*** (0.019)	1.243*** (0.019)	1.338*** (0.029)	1.339*** (0.029)	1.338*** (0.029)
Age Squared	0.996*** (0.000)	0.996*** (0.000)	0.996*** (0.000)	0.995*** (0.000)	0.995*** (0.000)	0.995*** (0.000)
married	2.753*** (0.088)	2.735*** (0.089)	2.725*** (0.089)	2.888*** (0.132)	2.886*** (0.132)	2.874*** (0.133)
hhsiz	1.012 (0.012)	1.014 (0.012)	1.015 (0.012)	1.015 (0.015)	1.014 (0.015)	1.015 (0.015)
below_prim	1.512*** (0.093)	1.549*** (0.094)	1.559*** (0.094)	1.663*** (0.167)	1.671*** (0.168)	1.702*** (0.171)
prim_comp	1.634*** (0.088)	1.682*** (0.089)	1.873*** (0.117)	2.492*** (0.143)	2.509*** (0.143)	2.517*** (0.193)
postpri	1.952*** (0.076)	2.054*** (0.079)	2.241*** (0.095)	2.743*** (0.107)	2.782*** (0.112)	3.301*** (0.142)
HH head	3.233*** (0.105)	3.217*** (0.106)	3.226*** (0.106)	2.963*** (0.141)	2.942*** (0.141)	2.970*** (0.142)
spouse	0.065*** (0.267)	0.067*** (0.263)	0.066*** (0.262)	0.034*** (0.420)	0.033*** (0.420)	0.033*** (0.422)
land_poss	1.274*** (0.040)	1.275*** (0.041)	1.277*** (0.041)	1.109** (0.049)	1.108** (0.049)	1.112** (0.051)
north	0.955 (0.089)	1.010 (0.095)	1.004 (0.096)	0.734** (0.139)	0.749** (0.138)	0.750** (0.138)
south	0.960 (0.081)	0.985 (0.082)	0.983 (0.082)	0.854 (0.127)	0.858 (0.127)	0.874 (0.127)
east	0.765*** (0.085)	0.756*** (0.085)	0.752*** (0.085)	1.027 (0.167)	1.023 (0.166)	1.037 (0.166)
west	0.952 (0.105)	0.951 (0.105)	0.955 (0.105)	0.770** (0.132)	0.776* (0.131)	0.783* (0.130)
NE	1.097 (0.118)	1.133 (0.122)	1.170 (0.123)	0.763 (0.221)	0.765 (0.226)	0.799 (0.229)
muslim		0.921 (0.090)	0.968 (0.116)		1.016 (0.120)	1.112 (0.199)
otherel		0.712*** (0.118)	0.715*** (0.118)		0.817 (0.141)	0.825 (0.141)
sc		1.238*** (0.078)	1.321*** (0.102)		0.996 (0.115)	1.346* (0.180)
st		1.359*** (0.110)	1.687*** (0.134)		1.118 (0.224)	1.732* (0.284)
SCprim_comp			0.800 (0.204)			0.879 (0.312)
SCpostpri			0.926 (0.176)			0.547** (0.239)
STprim_comp			0.794 (0.319)			0.949 (0.559)
STpostpri			0.413*** (0.242)			0.434* (0.443)

MUSprim_comp	0.814 (0.231)	1.244 (0.352)
MUSpostpri	0.977 (0.199)	0.814 (0.256)

\*\*\* p <= 0.001

\*\* p <= 0.01

\* p <= 0.05

Standard deviations in parentheses.

Uneducated, upper caste, Hindu, unmarried, central region are the omitted categories.

**Annex Table 5: Coefficients of multinomial regression models predicting the probability of allocation to various employment types for RURAL MEN (age 15-59 excluding students)**

	Model 1: Base Model				Model 2: Base model+Interaction Terms			
	Non-Farm Self-Emp v/s Regular Salaried	Self-emp Farmers v/s Regular Salaried	Casual v/s Regular Salaried	Not in LF v/s Regular Salaried	Non-Farm Self-Emp v/s Regular Salaried	Self-emp Farmers v/s Regular Salaried	Casual v/s Regular Salaried	Not in LF v/s Regular Salaried
Age	0.018 (0.009)	-0.052*** (0.009)	-0.059*** (0.009)	-0.242*** (0.011)	0.018 (0.009)	-0.052*** (0.009)	-0.058*** (0.009)	-0.242*** (0.011)
Age Squared	-0.000** (0.000)	0.001*** (0.000)	0.000* (0.000)	0.004*** (0.000)	-0.000** (0.000)	0.001*** (0.000)	0.000* (0.000)	0.004*** (0.000)
married	0.014 (0.043)	0.121** (0.042)	0.063 (0.042)	-1.037*** (0.057)	0.011 (0.043)	0.120** (0.042)	0.058 (0.042)	-1.037*** (0.057)
Household size	0.062*** (0.006)	0.009 (0.006)	0.029*** (0.006)	0.010 (0.008)	0.062*** (0.006)	0.009 (0.006)	0.028*** (0.006)	0.009 (0.008)
below_prim	-0.122* (0.055)	-0.404*** (0.054)	-0.521*** (0.052)	-0.675*** (0.074)	-0.122* (0.055)	-0.410*** (0.054)	-0.533*** (0.052)	-0.686*** (0.074)
prim_comp	-0.393*** (0.048)	-0.634*** (0.047)	-1.057*** (0.046)	-1.057*** (0.066)	-0.328*** (0.061)	-0.659*** (0.060)	-1.103*** (0.060)	-1.165*** (0.087)
postpri	-1.131*** (0.038)	-1.573*** (0.037)	-2.486*** (0.037)	-1.469*** (0.051)	-1.069*** (0.047)	-1.592*** (0.046)	-2.648*** (0.047)	-1.587*** (0.064)
hhhead	-0.014 (0.042)	-0.051 (0.041)	-0.000 (0.041)	-1.532*** (0.067)	-0.015 (0.042)	-0.052 (0.041)	-0.005 (0.041)	-1.535*** (0.067)
Land ossessed	0.167*** (0.015)	0.699*** (0.014)	-0.807*** (0.019)	-0.051* (0.023)	0.167*** (0.015)	0.697*** (0.014)	-0.808*** (0.019)	-0.052* (0.023)
north	-0.960*** (0.043)	-1.101*** (0.040)	-0.952*** (0.042)	-0.662*** (0.064)	-0.954*** (0.043)	-1.100*** (0.040)	-0.946*** (0.042)	-0.657*** (0.064)
south	-0.001 (0.036)	-1.891*** (0.040)	0.239*** (0.036)	-0.201*** (0.053)	0.008 (0.036)	-1.889*** (0.040)	0.239*** (0.036)	-0.201*** (0.053)
east	-0.104* (0.045)	-0.225*** (0.043)	0.067 (0.044)	0.396*** (0.059)	-0.105* (0.045)	-0.222*** (0.043)	0.076 (0.044)	0.404*** (0.059)
west	-0.977*** (0.044)	-0.986*** (0.040)	0.188*** (0.040)	-0.430*** (0.063)	-0.972*** (0.044)	-0.985*** (0.040)	0.190*** (0.040)	-0.432*** (0.064)
NE	-0.685*** (0.067)	-0.191** (0.060)	-0.551*** (0.067)	-0.045 (0.091)	-0.678*** (0.068)	-0.191** (0.060)	-0.557*** (0.068)	-0.057 (0.091)
muslim	0.478*** (0.045)	-0.222*** (0.047)	0.085 (0.046)	0.144* (0.063)	0.719*** (0.085)	-0.185* (0.086)	0.171* (0.084)	0.142 (0.108)
otherel	0.086 (0.054)	-0.193*** (0.054)	-0.080 (0.052)	0.300*** (0.074)	0.078 (0.054)	-0.190*** (0.054)	-0.085 (0.052)	0.295*** (0.074)
sc	-0.216*** (0.034)	-0.429*** (0.034)	0.640*** (0.032)	0.051 (0.047)	-0.218*** (0.064)	-0.509*** (0.062)	0.408*** (0.059)	-0.163* (0.082)
st	-0.219*** (0.053)	-0.064 (0.048)	0.683*** (0.048)	-0.129 (0.073)	-0.147 (0.085)	-0.083 (0.079)	0.580*** (0.078)	-0.348** (0.113)
SCprim_comp					-0.113 (0.107)	-0.058 (0.105)	0.104 (0.098)	0.123 (0.147)
SCpostpri					-0.054 (0.079)	0.066 (0.078)	0.516*** (0.073)	0.345*** (0.105)
STprim_comp					-0.118 (0.169)	0.304* (0.153)	0.328* (0.152)	0.606** (0.222)
STpostpri					-0.123 (0.114)	-0.128 (0.105)	0.207 (0.106)	0.331* (0.156)
MUSprimcomp					-0.283* (0.137)	-0.005 (0.139)	-0.218 (0.137)	0.069 (0.183)
MUSpostpri					-0.446***	0.028	-0.056	0.010

					(0.105)	(0.107)	(0.108)	(0.139)
_cons	1.177***	3.038***	4.178***	5.132***	1.138***	3.063***	4.240***	5.217***
	(0.154)	(0.148)	(0.148)	(0.188)	(0.155)	(0.150)	(0.150)	(0.191)

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\*\*\* p <= 0.001

\*\* p <= 0.01

\* p <= 0.05

Uneducated, upper caste, Hindu, unmarried, central region are the omitted categories.  
Standard deviations in parentheses.

**Annex Table 6: Coefficients of multinomial regression models predicting the probability of allocation to various employment types for URBAN MEN (age 15-59 excluding students)**

	Model 1: Base Model				Model 2: Base model+Interaction Terms			
	Non-Farm Self-Emp v/s Regular Salaried	Self-emp Farmers v/s Regular Salaried	Casual v/s Regular Salaried	Not in LF v/s Regular Salaried	Non-Farm Self-Emp v/s Regular Salaried	Self-emp Farmers v/s Regular Salaried	Casual v/s Regular Salaried	Not in LF v/s Regular Salaried
Age	0.068*** (0.008)	-0.110*** (0.020)	-0.056*** (0.010)	-0.260*** (0.011)	0.068*** (0.008)	-0.105*** (0.020)	-0.054*** (0.010)	-0.259*** (0.011)
Age Squared	-0.001*** (0.000)	0.002*** (0.000)	0.000 (0.000)	0.004*** (0.000)	-0.001*** (0.000)	0.002*** (0.000)	0.000 (0.000)	0.004*** (0.000)
married	0.140*** (0.034)	0.406*** (0.102)	0.197*** (0.048)	-1.184*** (0.058)	0.142*** (0.034)	0.396*** (0.102)	0.196*** (0.048)	-1.183*** (0.058)
HH size	0.122*** (0.005)	0.191*** (0.010)	0.073*** (0.007)	0.065*** (0.008)	0.122*** (0.005)	0.192*** (0.010)	0.072*** (0.007)	0.065*** (0.008)
below_prim	-0.269*** (0.051)	-0.719*** (0.114)	-0.635*** (0.056)	-0.699*** (0.087)	-0.265*** (0.051)	-0.772*** (0.114)	-0.639*** (0.056)	-0.716*** (0.087)
prim_comp	-0.467*** (0.045)	-0.972*** (0.100)	-1.092*** (0.050)	-1.202*** (0.078)	-0.441*** (0.058)	-1.066*** (0.119)	-1.037*** (0.065)	-1.310*** (0.105)
postpri	-0.851*** (0.038)	-1.640*** (0.079)	-2.297*** (0.044)	-0.922*** (0.060)	-0.798*** (0.047)	-2.008*** (0.092)	-2.451*** (0.055)	-1.090*** (0.076)
hhhead	-0.340*** (0.032)	0.080 (0.093)	-0.100* (0.047)	-1.565*** (0.066)	-0.340*** (0.032)	0.072 (0.093)	-0.106* (0.047)	-1.567*** (0.066)
Land possessed	0.203*** (0.020)	0.569*** (0.023)	-0.231*** (0.050)	0.089* (0.034)	0.203*** (0.020)	0.571*** (0.023)	-0.232*** (0.051)	0.086* (0.035)
north	-0.328*** (0.033)	-0.843*** (0.084)	-0.746*** (0.054)	-0.197** (0.061)	-0.328*** (0.033)	-0.856*** (0.084)	-0.736*** (0.054)	-0.200*** (0.061)
south	-0.174*** (0.030)	-1.203*** (0.088)	0.595*** (0.042)	-0.036 (0.054)	-0.171*** (0.030)	-1.272*** (0.089)	0.580*** (0.042)	-0.046 (0.054)
east	0.015 (0.039)	-0.726*** (0.111)	0.449*** (0.054)	0.380*** (0.064)	0.019 (0.039)	-0.728*** (0.111)	0.444*** (0.054)	0.373*** (0.064)
west	-0.401*** (0.030)	-1.201*** (0.086)	0.019 (0.045)	-0.165** (0.055)	-0.400*** (0.031)	-1.212*** (0.086)	0.001 (0.045)	-0.173** (0.055)
NE	-0.147 (0.086)	0.220 (0.165)	-0.190 (0.143)	0.415** (0.141)	-0.132 (0.086)	0.107 (0.169)	-0.174 (0.143)	0.391** (0.142)
muslim	0.401*** (0.031)	-0.388*** (0.088)	0.193*** (0.044)	0.159** (0.055)	0.356*** (0.063)	-1.041*** (0.143)	0.002 (0.072)	-0.138 (0.105)
otherel	0.234*** (0.043)	-0.190 (0.139)	0.365*** (0.063)	0.429*** (0.069)	0.239*** (0.043)	-0.206 (0.140)	0.372*** (0.063)	0.431*** (0.069)
sc	-0.412*** (0.031)	-0.653*** (0.096)	0.503*** (0.037)	0.212*** (0.049)	-0.219*** (0.064)	-0.905*** (0.145)	0.391*** (0.066)	0.014 (0.103)
st	-0.626*** (0.071)	0.646*** (0.118)	0.398*** (0.079)	-0.214 (0.114)	-0.451** (0.142)	-0.318 (0.262)	0.483*** (0.131)	-0.675* (0.264)
SCprim_comp					-0.220* (0.098)	-0.423 (0.305)	-0.220* (0.104)	0.137 (0.167)
SCpostpri					-0.301*** (0.077)	0.627** (0.204)	0.406*** (0.085)	0.269* (0.119)
STprim_comp					0.432	0.422	-0.149	0.480

					(0.222)	(0.452)	(0.228)	(0.422)
STpostpri					-0.428*	1.464***	-0.238	0.586*
					(0.171)	(0.297)	(0.188)	(0.297)
MUSprim					0.074	0.418	-0.026	0.174
comp					(0.097)	(0.253)	(0.117)	(0.181)
MUSpostpri					0.059	1.185***	0.450***	0.423***
					(0.074)	(0.187)	(0.098)	(0.124)
_cons	-0.959***	-0.490	1.401***	3.527***	-0.992***	-0.330	1.455***	3.660***
	(0.132)	(0.334)	(0.172)	(0.185)	(0.135)	(0.337)	(0.174)	(0.189)

\*\*\* p <= 0.001

\*\* p <= 0.01

\* p <= 0.05

Uneducated, upper caste, Hindu, unmarried, central region are the omitted categories.  
Standard deviations in parentheses.

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